Remarks

The instant Office Action dated October 28, 2008, lists the following rejections: claims 1-6 and 13-16 stand rejected under 35 U.S.C. § 103(a) over Meyerson (EP 0 459 122 A) in view of Agnello (Applied Physics Letter 1992); claim 7 stands rejected under 35 U.S.C. § 103(a) over Meyerson in view of Agnello and further view of Mizushima (US Patent No. 6,395,621). The Office Action also indicated that claims 8-12 are allowed, and that claim 17 is objected to as being dependent on a rejected based claim, but would be allowable if rewritten in independent form. Applicant traverses all of the rejections and, unless explicitly stated by the Applicant, does not acquiesce to any objection, rejection or averment made in the Office Action.

After having thoroughly reviewed the asserted combination of teachings (particularly Angello), Applicant respectfully submits that the rejections cannot be maintained because the combination does not correspond to the claimed invention and the combination is not motivated. The following exemplifies these deficiencies.

The cited Agnello 1992 publication does support the Examiner's characterization and assertions at pp. 3-4 of the Office Action. The Examiner appears to be alleging that pp. 1298-1299 of Agnello teach improving surface morphology generally, *e.g.,* as may be applicable to most any semiconductor epitaxial-deposition process, and in this instance, applicable to the semiconductor epitaxial-deposition process of the Meyerson '122 reference. The Meyerson '122 reference, however, does not exhibit the crystal-twinning problem to which the Agnello publication is addressed. Agnello's crystal-twinning problem occurs when two separate crystals share some of the same crystal lattice points in a symmetrical manner and this results in an intergrowth of two separate crystals in undesirable configurations. The semiconductor epitaxial-deposition process of the Meyerson '122 reference does not concern such a situation and/or involve the problem of such undesired crystal intergrowth. Thus, the relied-upon teaching from the Meyerson '122 reference would not be benefited by this surface morphology situation being addressed by the cited Agnello 1992 publication, and a skilled artisan would not be motivated to solve a problem that is not there. Such logic has been recently supported by the USPTO Board of Appeals and Interferences in recent decisions that have used KSR in

this manner. *See, e.g., Ex Parte Rinkevich et al,* Appeal 20071317, decided May 29, 2007 ("In the instant case, we conclude that a person of ordinary skill in the art having common sense at the time of the invention would not have reasonably looked to ... solve a problem already solved ...."); and Ex Parte Green, Appeal 20071271, decided June 12, 2007 ("Therefore, we conclude that an artisan having common sense at the time of the invention would not have reasonably considered embedding [an article] within an existing [approach] in the manner suggested by the Examiner."); *see also In re Kotzab,* 217 F.3d 1365 (Fed. Cir. 2000) (proposed modification must not be made in the abstract but rather made in view of the entire teaching of the prior art).

Importantly, the background of Applicant's specification explains, according to Agnello's own teachings, that there are reported problems with the crystalline quality and target region being grown, and that the claimed invention addresses such problems with specific reference to the Examiner's asserted Agnello 1992 publication. See paragraphs 2-4 of Applicant's Specification, and see also attached Agnello publication in another report from Applied Physics Letter 1992 (as part of the accompanying IDS). Applicant's specification goes on to explain the unexpected and "surprisingly" obtained a highly-desirable steep profile and crystalline quality from the claimed process. As Applicant's claimed invention not only solves the problems acknowledged in the asserted Agnello publication, but also presents a solution with surprising results for different attributes, and it would be more than fair to say that Applicant's claimed invention is not suggested by the asserted Agnello publication. Rather, with the asserted Agnello publication teaching a manufacturing process that causes these noted problems, the asserted Agnello publication teaches away from the asserted combination of references.

The M.P.E.P. and the applicable U.S. Supreme Court law requires that the claim be considered "as a whole" (35 U.S.C. §103(a)), while taking into consideration the problem(s) being addressed by the claimed invention and any unexpected results. Thus, Supreme Court in *KSR* reaffirmed the familiar framework for determining obviousness as set forth in *Graham v. John Deere Co.* (383 U.S. 1, 148 USPQ 459 (1966)), and stated that, "when the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be non-obvious." The Court further tied in the relationship between the teach-away standard and demonstrating

unpredictable results. "The fact that the elements [in *Adams*] worked together in an unexpected and fruitful manner supported the conclusion that Adam's design was not obvious to those skilled in the art." *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1742 (2007).

      In view of the remarks above, Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Peter Zawilski, of NXP Corporation at (408) 474-9063 (or the undersigned).

Please direct all correspondence to:

Corporate Patent Counsel
NXP Intellectual Property & Standards
1109 McKay Drive; Mail Stop SJ41
San Jose, CA 95131

CUSTOMER NO. 65913

Attachment: IDS

By: _____
    Name: Robert J. Crawford
    Reg. No.: 32,122
    651-686-6633
    (NXPS.265PA)